SJSU Research Foundation
2022 Annual Report

SAN JOSÉ STATE UNIVERSITY
DIVISION OF RESEARCH AND INNOVATION

The numbers and statistics presented in this report are limited to the activity managed by the San José State University Research Foundation and is not representative of the overall research expenditures of the larger institution as there are programs funded directly by the institution or through the Tower Foundation.

The annual report also reflects award activity or gross sponsor commitments recorded in the fiscal year. The audited financial statements reflect fiscal year expenses on sponsored awards. In many cases, expenses are actually lower than the award activity because of multi-year awards, which are recorded in their entirety when received but expended over multiple years.

Cover: SJSU Research Foundation Early Career Investigator Award winner and Assistant Professor Madaly Radlauer interacts with student in her chemistry lab.

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ABOUT

The SJSU Research Foundation is a non-profit 501(c)3 California corporation that operates solely for the benefit of San José State University. It is an “auxiliary” of San José State University.

Auxiliary organizations at the California State University (CSU) are non-profit organizations and separate legal entities. They operate pursuant to written operating agreements with the CSU Board of Trustees, have separate governing boards with close connections to a campus and follow all legal and policy rules established by the CSU system and the respective campus administration. Auxiliary organizations were created to perform essential functions associated with a post secondary educational institution, which under California law were difficult, cumbersome or legally restricted for the university and were not supported by state funding.

The entire team at the SJSU Research Foundation continues to be inspired by the endeavours and accomplishments of SJSU researchers. We are committed to supporting their efforts through our dedication to providing streamlined, robust, and efficient research administration systems and services.

LEADERSHIP

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SJSU Research Foundation
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Andrew Exner

Executive Director
SJSU Research Foundation

The 2020–21 fiscal year represented yet another period where flexibility, change, and adjustment became a consistent theme for nearly everyone who worked or engaged with the San José State University Research Foundation. In the face of constant change and uncertainty, our mission to support SJSU's Research, Scholarship, and Creative Activity (RSCA) is what kept us focused and grounded.

Our research-active faculty and student numbers continue to grow as do the number of submitted proposals, which bodes well for the future growth of the SJSU research enterprise and the achievement of our ambitious goals. We continue to modernize our operation, so we can scale our services, support the growth, and be in lockstep with the University's Transformation 2030 plan.

Our scope of work has also grown to include the administration and management of competitive faculty fellowships, all RSCA-related contractual agreements, and intellectual property matters on behalf of the University. The team has proven its ability to effectively take on these new responsibilities as they mirror many of the existing processes and functions.

As you read through the researcher profiles in this annual report, take note of the commitment and passion these researchers have for such a wide variety of academic areas. Helping them focus on that work with the confidence that they are supported by a group of dedicated professionals is what motivates us to keep improving. We take pride in knowing that our support contributes to the local and global impact of SJSU RSCA in our local and global communities for years to come.

While it is difficult to distill the work of so many into one annual report, we hope you enjoy learning more about the people who make SJSU's research enterprise what it is.

NUMBERS

SJSU Research Foundation numbers or Fiscal Year 2020–21, which ended on June 30th, 2021

229 Awards received valued at more than **$49 Million**

377 Proposals submitted valued at more than **$243 Million (255 faculty)**

$47 Million
In research expenditures across 457 active projects

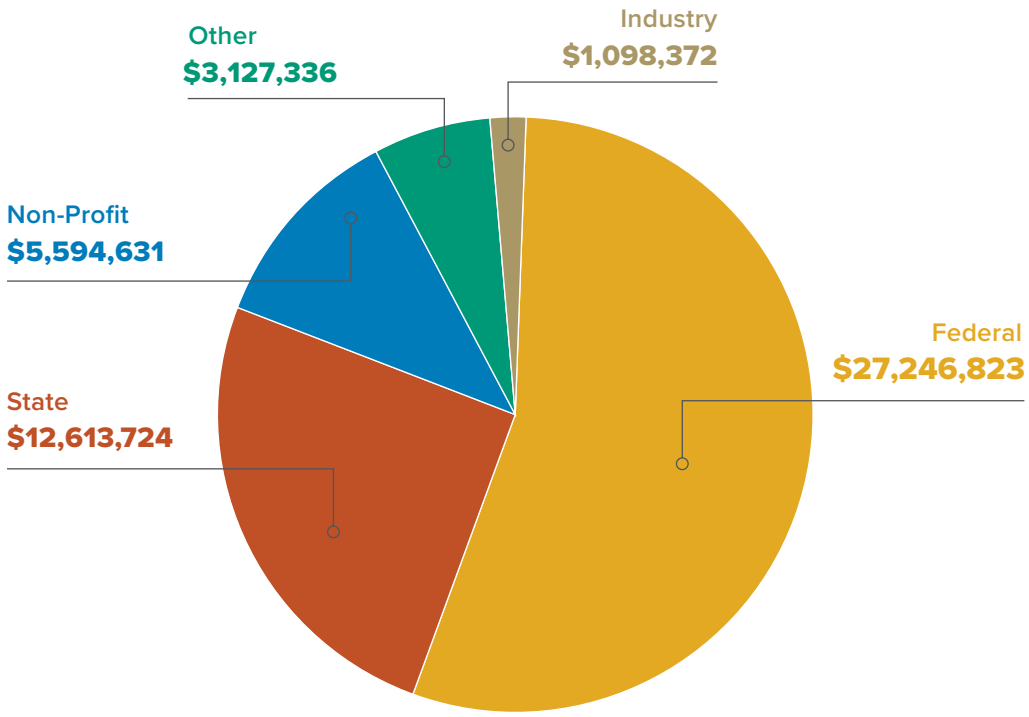
190 SJSU Faculty
Engaged in sponsored research projects, grants, or contracts managed by the Research Foundation

506 SJSU Students
Engaged in sponsored research projects, grants or contracts managed by the Research Foundation

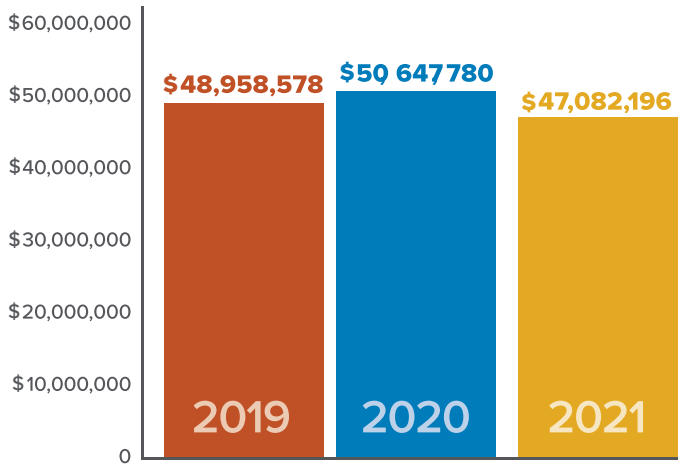
379 SJSU Project Staff
Engaged in sponsored research projects, grants or contracts managed by the Research Foundation

$1.4 Million
Returned to San José State University in indirect revenue and strategic investment to the campus

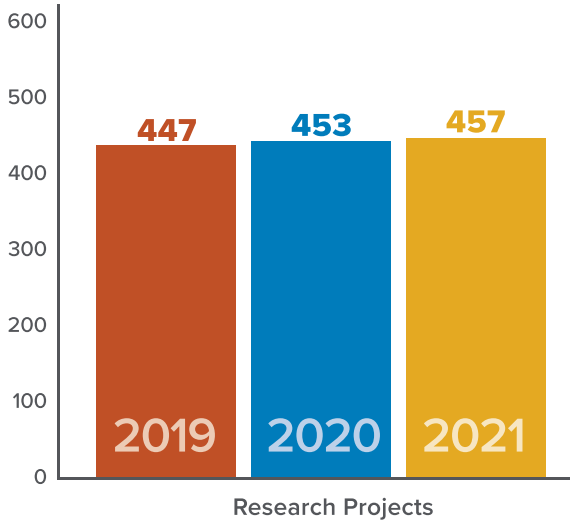
2021 Award Type



Award Expenditures



Number of Awards



Research expeditures at SJSU decreased from $50.6M in FY2019-20 to $47.1M in FY2020-21 due the ongoing impacts of COVID-19 and associated facilities closures. The number of personnel engaged in research increased 13% to 909 in FY2020-21.

Elena Klaw and Andrea Tully

Exploring the Relationship Between Service-Learning and Community Engagement Among Students

Andrea Tully, Assistant Director Center for Community Learning & Leadership. Elena Klaw, Professor of Psychology and the Director of the Center for Community Learning & Leadership.

When the state allocated over $1 million annually to expand and institutionalize service-learning at California State University in the year 2000, the SJSU Center for Service Learning, which is housed at the Undergraduate Education Program within Academic Affairs, was born. This funding allowed the Center — now called the Center for Community Learning and Leadership (CCLL) — to pursue research that explores the effects of service-learning and community engagement to college students, alumni, faculty, and community organizations.

Service-learning is defined by the Corporation for National Service as "a pedagogical approach that integrates meaningful service and community involvement with instruction and reflection related to a disciplinary curriculum." During the course of its research on service-learning, CCLL has looked at the impact service-learning has on students, and found that it leads to numerous positive outcomes, including an increase in academic skills, engagement, leadership, service-related future plans, and satisfaction with the university.

"Our interview research suggests that service-learning fosters an awareness of social issues, as well as the development of professional skills and networks, and that participation in an intensive remote community engaged learning program enhances social awareness, career skills, civic motivation, and academic involvement," says Elena Klaw, CCLL's director, who works on the project with Assistant Director Andrea Tully.

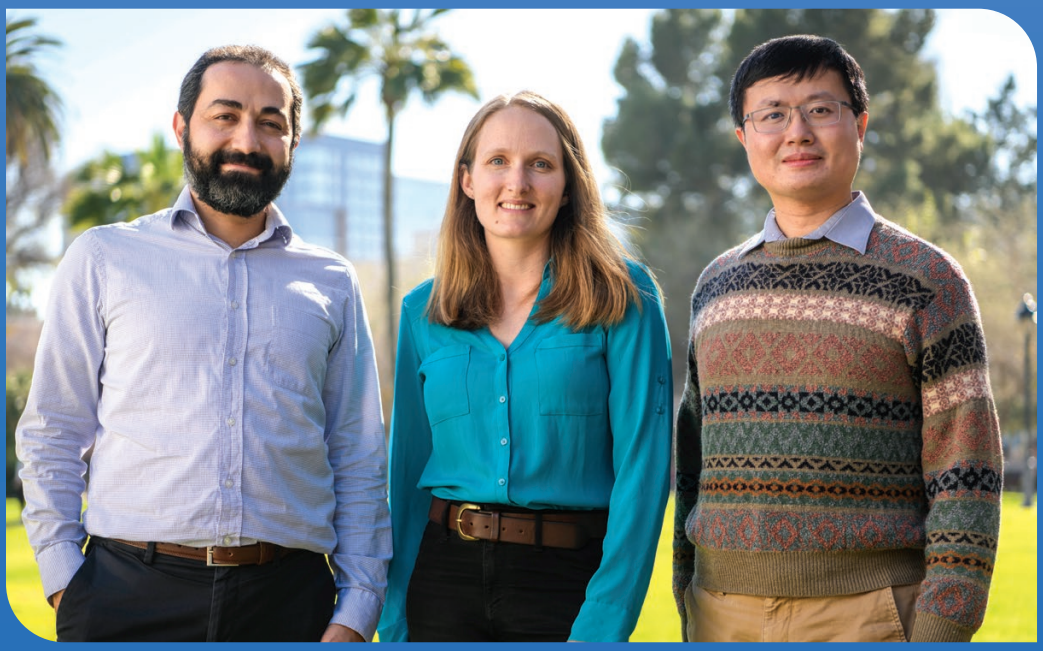
Involvement of SJSU students has been substantial: Since CCLL's inception, 80,000 students have contributed more than 1.4 million hours of service through service-learning courses in partnership with hundreds of community-based organizations that meet critical needs — particularly when it comes to educational equity. For example, some students have mentored elementary school children to help them develop STEM-related skills.

Klaw says the results are a testimony to the power of service-learning.

"We are heartened that our qualitative findings suggest that participation in funded community engaged peer leadership programs create connections that motivate students to remain in college, especially for students, such as veterans, who often feel isolated at SJSU," Klaw says.

Hilary Hurst, Ehsan Khatami, and Hiu Yung Wong

Training the Future Quantum Workforce



Ehsan Khatami, Associate Professor of Physics, Hilary Hurst, Assistant Professor in the Department of Physics and Astronomy, and Hiu Yung Wong, Assistant Professor, Silicon Valley AMDT Endowed Chair in Electrical Engineering

Hilary Hurst, assistant professor in the Department of Physics and Astronomy, credits her success to her father, who initially sparked an interest in physics, as well as her professors, who nurtured that love of the discipline and positioned her to build a career.

"My father majored in physics in college, and although he didn't ultimately pursue it as a career, he always instilled in me a love of physics and science more broadly as a way to understand the world around us," she says. "I was also very fortunate to have amazing undergraduate professors that showed me all the diverse professional opportunities one can have with a career in physics."

Today, Hurst is leading a project — along with co-investigators Ehsan Khatami, associate professor of physics, and Hiu Yung Wong, assistant professor, Silicon Valley AMDT Endowed Chair in Electrical Engineering — that assists students in much the same way that her professors helped her. The program is designed to prepare students on the master's and doctoral levels to enter the quantum workforce through research traineeships and a semester hands-on exchange program at the Colorado School of Mines.

Thanks to the program, students have been able to help the team with research projects as they learn firsthand what it's like to pursue a quantum physics career. Wong explains the work he's done with students this way: "Students are hired to model the data and they learn cryogenic electronics and circuit design in this process. They provide new insights in interpreting the data, resulting in a few publications."

In addition to the strong research skills students gain, the program provides a well-rounded experience which can help their careers in other ways.

> "Most of my students also get to sharpen their scientific communication skills by giving presentations in national conferences," says Khatami.

As a result, Khatami says the work he does with colleagues will ultimately advance the quantum physics discipline and its workforce.

"The new grant will help us train the next generation of workforce for quantum industries, a field that is increasingly interdisciplinary, by tapping into the talented and diverse pool of students at SJSU and by attracting other students from around the country to our new and unique MS program," he says.

Jennifer Schachner

Offering Land and Water Fitness Classes for Older People With Arthritis

Located at 730 Empey Way, San Jose, CA, the Timpany Center offers affordable swim lessons, as well as Aqua Fitness Classes designed for individuals of all ages, fitness, and ability levels.

It seems that Jennifer Schachner, assistant lecturer in the Department of Kinesiology and program and operations director at the Timpany Center, was destined to work with older generations. As the caretaker for multiple members of her family as a child, she learned at a young age about the challenges people face as they get older.

"While I loved them dearly, I was only exposed to the negative side of aging in terms of poor health and disease," she explains.

When she began studying kinesiology in college, Schachner learned poor health doesn't have to be synonymous with aging.

> "As a student at SJSU in the Kinesiology Department, I began to see how exercise, fitness, and wellness could ease some of the effects that aging had on the human body and increase the quality of life."

Today, Schachner uses her work at the Timpany Center — funded by Sourcewise — to increase the quality of life for seniors suffering from arthritis. The Center's evidenced-based program, which is certified by the Arthritis Foundation, offers free land and water fitness classes to seniors who are among the most vulnerable in the community, such as low-income seniors and those who live alone in areas where these types of programs aren't available. And during COVID, the Timpany Center's staff, interns, and volunteers were still able to provide classes online, so seniors wouldn't miss out on these vital services.

Now, the Timpany Center offers two water classes, one land class, and one Zoom class. Schachner says she is encouraged by the program's impact and has high hopes for its growth.

"We have really been able to reach out to different parts of the community with this program. Since we are able to teach classes for free, it really allows us to work with a part of the community that may not be able to join other fitness classes due to cost," she says. "My hope is to be able to target and reach even more community members who are at risk and give them the benefits that this program has to offer, and continue to work with students and volunteers in educating them about arthritis fitness programs."

Katherine Cushing, Michael Oye

A Spectrum of Outreach

Katherine Kao Cushing, professor of Environmental Studies, faculty director of Programs on Global Studies, and Michael Oye, lecturer in the Chemical and Materials Engineering department and executive director of CommUniverCity.

As the COVID-19 pandemic rages on, Katherine Cushing, professor of Environmental Studies, faculty director of Programs on Global Studies, and Michael Oye, lecturer in the Chemical and Materials Engineering department and executive director of CommUniverCity, used their research project to help boost vaccination rates among San José residents — particularly those from the most vulnerable and high-risk populations. Oye explains the importance of their research in this way: "The purpose of this research was to better understand the vaccination status and concerns of Central San José residents with a focus on underserved, low-income community residents after the initial vaccine rollout phase. Additionally, the study sought to understand what additional services residents living in focal neighborhoods were interested in receiving."

In order to gain this understanding, Cushing and Oye utilized the Spectrum of Prevention guidelines: Strengthening Individual Knowledge and Skills, Promoting Community Education, Educating Providers, Fostering Coalitions and Networks, Changing Organizational Practices, and Influencing Policy and Legislation. Typically used in prevention initiatives for traffic safety, violence prevention, injury prevention, nutrition, and fitness, this approach is effective, because it combines a variety of strategies to address community needs.

"The Spectrum identifies multiple levels of intervention and helps people move beyond the perception that prevention is merely education, but an organized grassroots effort to which they have an active role in improving the health of communities," says Oye.

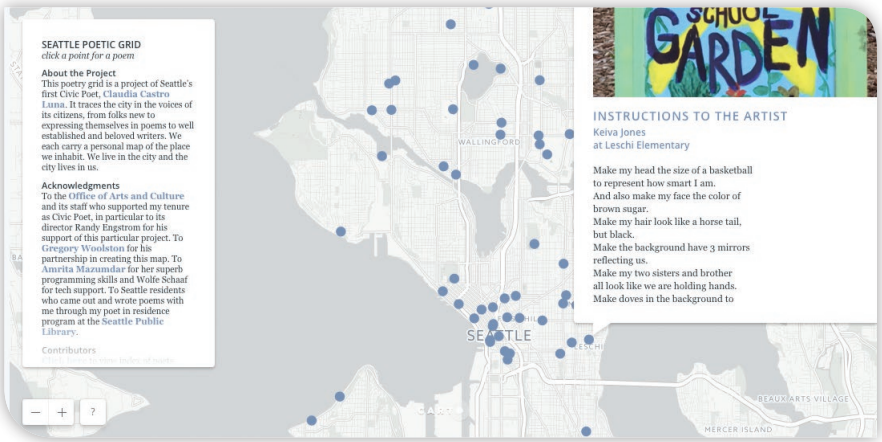
To that end, the researchers deployed a group of undergraduate and graduate students to underserved communities where they went door to door to speak to residents, collected data at large public events, and passed out fliers. Oye says he would like to see this study help to inform policy that will improve vaccination outcomes.

"It is with hope that this study can influence policy and legislation with the Santa Clara County Public Health Department in reaching the highest vaccination rate for Central San José neighborhoods," Oye says. "The ultimate goal for the study is that its findings contribute to more effective policy regarding vaccine rollouts."

Revathi Krishnaswamy

Using Technology for Social Good

Revathi Krishnaswamy, professor, MA advisor, and graduate coordinator in the Department of English and Comparative Literature.



Revathi Krishnaswamy, professor, MA advisor, and graduate coordinator in the Department of English and Comparative Literature, is merging technology with social good in her "San José Story Map" project. In order to do this, her team is building a digital map that leverages the power of stories to reveal San José in a new and different light. The project — which is funded by a grant from California Humanities — includes contributions from local artists, writers, students, residents, and community members who share their unique, and often untold, stories.

"The San José Story Map project shows how digital technologies can be used to bring people together to turn an urban space into a shared place of belonging," says Krishnaswamy.

"It is an open-ended project, and so we hope to add more stories in more languages from more individuals and communities — especially from those often marginalized or unheard. We would also like to expand the map beyond the city of San José to include the entire Silicon Valley."

Krishnaswamy's work was inspired by the Seattle Poetry Grid, which was created by civic poet Claudia Castro Luna to give diverse residents the opportunity to express themselves in verse.

"We saw how digital technologies could be leveraged and linked to art and literature in ways that includes, involves, and empowers the public," she explains.

In turn, Krishnaswamy has also empowered the graduate and undergraduate students who have been helping her with various aspects of the project.

"Students are actively involved in conducting research, managing production, providing technical support, organizing workshops and community events, and coordinating publicity and outreach for the project," says Krishnaswamy.

Adam Kochanski, Miguel Valero

Unique Model for Forecasting Fires

Adam Kochanski, assistant professor of wildfire modeling, and Miguel Valero, assistant professor of wildfire behavior and remote sensing, in the Wildfire Interdisciplinary Research Center in the College of Science.

Adam Kochanski, assistant professor of wildfire modeling, had a mentor who lit an academic flame in him that burned so bright, it completely changed his scientific interest and the trajectory of his career.

"The person who influenced my interest in wildfire modeling is Professor Mary Ann Jenkins. Her pioneer work on coupled fire-atmosphere models made me switch my scientific interests from ocean-atmosphere interactions to wildfires," he explains. "Without her, I would never have gotten into coupled fire-atmosphere modeling."

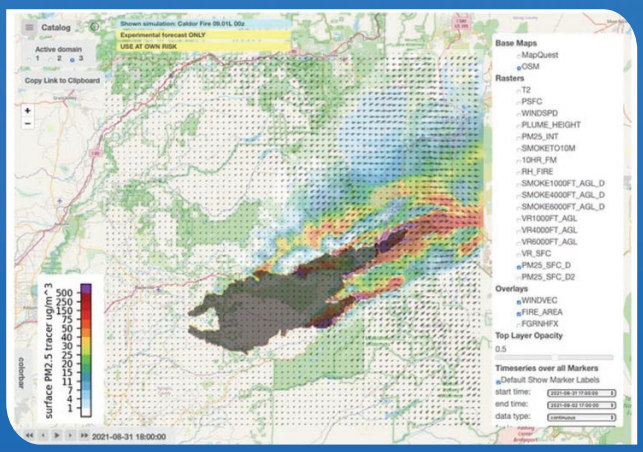
Thanks to her influence, Kochanski is now working with Miguel Valero, assistant professor, to improve the way wildfire behavior and smoke dispersion are predicted. In order to do this, they have built and tested a new integrated system that runs on high-performance computers using hundreds of processors. During the last fire season, the system was deployed to major wildfires and was able to provide over 300 forecast — which Kochanski says is because of its unique features.

"The system uses satellite and aircraft fire observations, with fuel moisture and weather data, to forecast where and how fast the fires will spread and when and where the air quality will be unhealthy," Kochanski says.

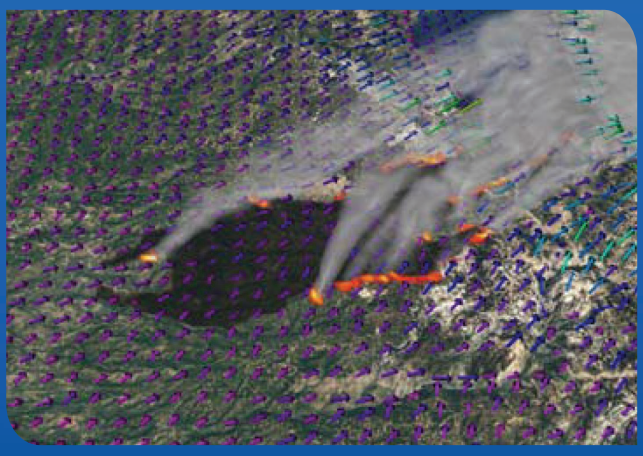
"The unique aspect of this system is that it predicts future weather conditions in-line with the fire behavior, accounting for the fact that large fires modify local weather."

This project was also unique for the students who assisted Kochanski and Valero, as it provided experiential learning, as well as payment, when they participated in the research.

"The students got first-hand experience working with a state-of-the-art coupled fire-atmosphere forecasting system," Kochanski says. "They got familiar with scientific programming and running numerical models on high-performance computers. They were exposed to collaborative work in a research team and witnessed the transition from research to operation, leading to the deployment of a product designed to serve the community and stakeholders. The project also provided financial support for students and covered their tuition."



Wildfire computer models



Mahboudeh (Marjan) Madadi

Using AI Tools to Detect and Mitigate Human Errors in Nuclear Power Plants

Mahboudeh Madadi, assistant professor in the Department of Marketing and Business Analytics.

Mahboudeh (Marjan) Madadi, assistant professor of business analytics at Lucas College and Graduate School of Business, is developing artificial intelligence (AI) tools to help detect and mitigate human errors in nuclear power plants (NPPs). This could have a significant positive impact on the way NPPs operate in the future.

> "By relying on the explainable capabilities of the proposed AI tool, we develop a 'warning system' to alert individuals of potential errors and prompt opportunities for appropriate mitigations," says Madadi.

So far, Madadi's research has led to the identification of a target system for industry partner Tennessee Valley Authority (TVA), and the development of a preliminary AI tool that detects anomalies within that system. In addition, Madadi's team, which includes two graduate students, performed a thorough literature review on the use of AI tools for the detection and mitigation of human factor errors at NPPs.

Madadi says the research is not only helping TVA, but is also giving the master's degree students she works with the opportunity to translate classroom learning into real-world solutions to problems.

"Working on this project helps students enhance their knowledge by applying what they learn in the classroom to real-world data," she says.

The success of this work is particularly gratifying for Madadi, because it's the culmination of a lifelong passion she developed after working with a mentor as an undergraduate student.

"The application of analytics to understand the systems around us has always been my passion," says Madadi. "I was first introduced to the field by one of my professors during my bachelor's degree. He showed me how vast the area is, and how I can apply the analytics tools to almost any application area from healthcare to manufacturing to any other industry."

Margaret “Peggy” Stevenson, Jesse Mejia, and Cindy Parra

Supporting People Re-Entering the Community After Incarceration

Members of the SJSU Record Clearance Project.

“I was hopeless and scared, and didn’t know where to turn,” explains a former client of the Service Navigation Mentoring Program, led by Margaret “Peggy” Stevenson, lecturer AY-C, Justice Studies and director of the SJSU Record Clearance Project (RCP), which houses the program. “I have struggled with alcohol and substance abuse and mental health issues for the past 20 years. That, along with being in and out of incarceration, meant I was unable to keep a job.”

Since graduating from the program, he has gone on to get stable housing, tackle his addiction, and mend the relationship with his family. “It’s come full circle, and I feel at ease,” he says. “Now I have a support system. I go to therapy. I own a car that’s in my name. This is the first time I have felt this kind of stability and peace.”

The Navigation Mentoring Program helps to create these types of success stories by pairing people exiting incarceration with mentors who understand their challenges most — those who have had their records expunged and gotten back on their feet to become re-integrated members of the community. Through the work of these mentors, clients get the help they need accessing numerous services that set them up for success, such as drug and alcohol recovery treatment, housing, food and benefits, and transportation assistance.

“With mentors as guides, justice-involved individuals gain structure and life skills necessary to achieve self-sufficiency and move forward with their lives,” says RCP Administrative Coordinator Jesse Mejia, who helps run the program along with Program Manager Cindy Parra.

Mejia says the program also benefits SJSU students who have become involved, since they gain a deeper understanding of the legal system and its repercussions. As one student notes: “The most rewarding thing about this work is the interaction I get to have with people that are incarcerated. Throughout the five years I have been in college, this has definitely been the most meaningful work I’ve done.”

Nikos Mourtos, Laura E. Sullivan-Green

Mastery Learning Approach Boosts Student Success

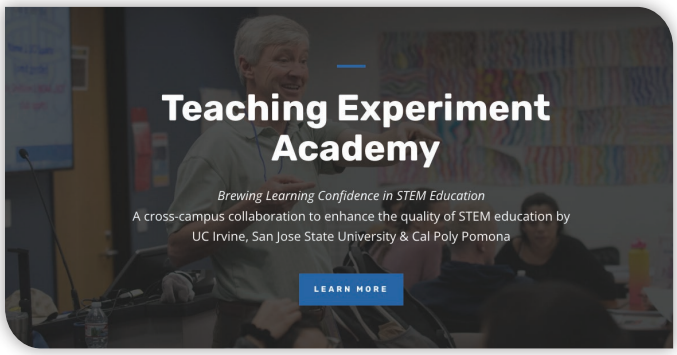
Nikos Mourtos, chairand professor of aerospace engineering, and Laura E. Sullivan-Green, associate professor of civil and environmental engineering, in the Charles W. Davidson College of Engineering.

For Nikos Mourtos, chair and professor of Aerospace Engineering, pedagogy is as personal as it is professional.

“Being married to an educator ensures that pedagogy is frequently discussed at home,” he notes. “These discussions led me in 1993 to experiment with cooperative learning in my aerospace propulsion class. Students liked it very much, and I liked the results. This first successful experiment with non-traditional pedagogy sparked my interest in engineering education research.”

In his current research — which he’s conducting with Laura E. Sullivan-Green, Associate Professor of Civil and Environmental Engineering — Mourtos is advancing pedagogy by helping STEM faculty from the University of California, Irvine; California State Polytechnic University, Pomona; and San José State University adopt mastery learning and specifications grading in their teaching, while helping students develop a growth mindset.

TEA TEACHING EXPERIMENT ACADEMY

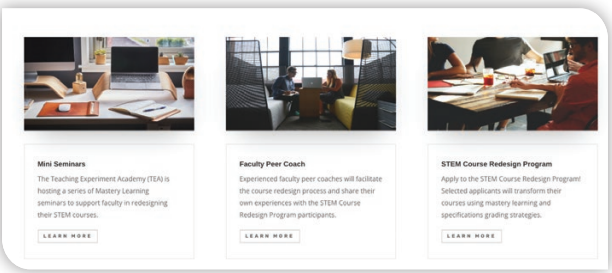


> “Mastering complex skills requires multiple opportunities for practice and frequent feedback from experts. This idea is at the heart of mastery learning and specifications grading,” says Mourtos.

“While traditional grading on the curve allows many students to pass without working knowledge of the material, mastery learning ensures that students who pass a course have demonstrated a set of skills, or specifications, at an appropriate level.”

This faculty development program, called the Teaching Experiment Academy, has led to 35 faculty members redesigning their courses to a mastery learning and specifications grading model. This resulted in a positive impact on student success, so Mourtos would like to see the program expand, because this approach to teaching is so beneficial.

“Mastery learning provides opportunities for students to rewrite and resubmit their assignments, using appropriate and timely feedback,” says Mourtos. “The single submission system, along with grading on the curve, was established for expediency and/or to save money. It does not reflect the reality of the learning process. If I do not allow students to resubmit a lab report, it saves me time from regrading it, or it saves grader money if a student assistant grades the reports. There is absolutely no pedagogical justification for not allowing students, who are novices in the subject matter, to have a second chance on a complex task.”



https://tea.dtei.uci.edu

SELF-SUPPORT PROGRAMS

In addition to sponsored program funding, SJSU Research Foundation also operates several self-support programs related to the Student Research, Scholarship, and Creative Activity (RSCA) activities.

Timpany Center

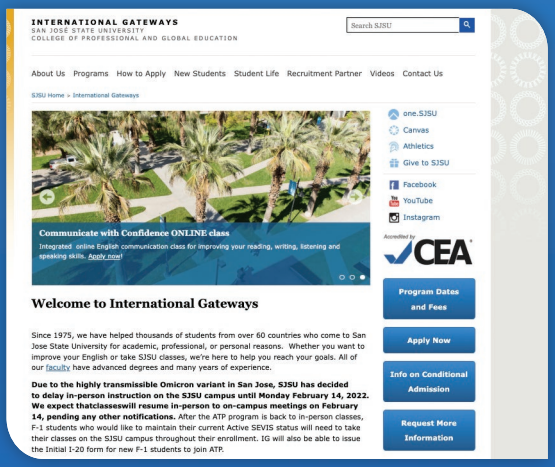
Physical Health and Wellness

The Timpany Center is a non-profit educations and therapeutic center. Operated as a non-profit partnership with Santa Clara County and the SJSU Research Foundation since 2009, the center promotes physical health, and wellness in individuals with disabilities, obesity and advanced age.

International Gateways

English Language Programs

Since the early 1980s, International Gateways has partnered with the SJSU Research Foundation to offer high-quality English language programs, cultural experiences, and support services to international students, professionals, and visitors who want to develop communication skills and strategies for success in a global community.



International House

An Intercultural Home

The International House offers an intercultural home to approximately 70 U.S. and international students attending San José State University. It was founded by alumni of SJSU, Alan and Phyllis Simpkins, who bought, remodeled and furnished the building in 1978.

2022 SJSU STUDENT RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY (RSCA) COMPETITION FINALISTS

These students will represent SJSU at the 36th Annual CSU Student Research Competition:

Group Project

Amarachi Aladi College of Social Science, Economics
Dang Minh Nhu Nguyen College of Science, Mathematics & Statistics
Evelyn Tran Undeclared
Quyen Nhi Tran College of Science, Mathematics & Statistics
Faculty Mentor: Egbe-Etu Etu Lucas College and Graduate School of Business, Marketing and Business Analytics
Retrospective Literature Review on Racial Disparities Pre-COVID and During COVID-19 Pandemic

Individual Projects

Kristina Smith Connie L. Lurie College of Education, Child and Adolescent Development
Faculty Mentor: Ellen Middaugh Connie L. Lurie College of Education, Child and Adolescent Development
Examining Social Media as a Context for Positive Youth Development During COVID

Roberto Campbell Charles W. Davidson College of Engineering, Computer Engineering
Faculty Mentor: Magdalini Eirinaki Charles W. Davidson College of Engineering, Computer Engineering
Reinforcement Learning for Defense of Software Defined Networks using MARL and Self-play

Dani Heinonen College of Social Science, Psychology
Faculty Mentor: Jill Citron College of Social Science, Psychology
An Evaluation of Student Perceptions of Campus Climate at San José State University

Justise Wattree College of Humanities and the Arts, Humanities
Faculty Mentor: Erik Johnson College of Humanities and the Arts, Humanities
The Two-Front War: Self-help and Black Health Activism during The Spanish Flu, HIV/AIDS, and COVID-19

SJSU RESEARCH FOUNDATION EARLY CAREER INVESTIGATOR AWARD

2022 ECIA Winners: Madalyn Radlauer and Rhonda Holberton

Madalyn Radlauer

Assistant Professor of Organometallic, Inorganic, and Polymer Chemistry

Madalyn Radlauer, assistant professor of organometallic, inorganic, and polymer chemistry, is leading a research group exploring how to design and create molecules that make chemical reactions easier. She says her work can be applied in numerous ways — like fuel production, pharmaceuticals, and medical diagnostic tools — and ultimately, this research will contribute to improving how chemical reactions behave.

"Our goal is to understand how the structure of these big molecules change the catalysis to enable challenging chemical reactions, which would make those reactions more efficient and sustainable," says Radlauer.

The research has also given students the opportunity to learn, grow, and explore chemistry in a new way, as they develop valuable skills that will help them throughout their careers.

"I have had the immense pleasure and honor of working with more than 40 SJSU students since I got to SJSU in 2017, including my current group," Radlauer says. "During their time in the group, these students practice many lab-specific skills — chemical synthesis, air-free and water-free techniques, characterization and analysis of molecules, chemical safety, and specialized instrumentation — as well as more general skills like notetaking, science communication, working in groups, collaboration, troubleshooting, project planning, and management."

Radlauer is using this project as an opportunity to follow in the footsteps of her own mentors, who encouraged her in the same ways she strives to inspire the students assisting with her research.

"It started with my high school chemistry instructor, Ms. Ekberg, who was an amazing role model and who gave me space to explore. In her class, there was more than a right and a wrong answer, especially in our lab experiences," says Radlauer. "I was also very lucky to have a fantastic undergraduate research mentor, Bob Waymouth at Stanford University, who continues to be a great support of my career today. He got me started on the chemistry of polymers and chemical catalysis, and since my research experience in his group, I have always been working in those two subfields of chemistry. It was also my experience in his lab that inspired me to specialize in inorganic chemistry."

Rhonda Holberton, assistant professor of digital media arts in the department of art and art history, creates art that marries new media technology with theories related to ecology and body politics. This is how she sums up her work:

"I think about the animations I create as virtual sculptures, the meshes are based on 'real' objects that have gone through multiple translations — both analog and digital," explains Holberton. "My projects have led me to a diverse set of activities that takes cues from Irving Goffman's breaching experiments including gold mining, electronic hacking and jamming, and casting of holes I dug in the remediated landscapes of decommissioned military bases."

Holberton's work has been well-received, and was featured in San Francisco at the Yerba Buena Center for the Arts and the Contemporary Jewish Museum. She's also received coverage in dozens of journals and news publications. Holberton says her project has gotten this reaction because it gets to the heart of the connection between man and machine.

Rhonda Holberton

Assistant Professor of Digital Media Arts

"Great art expands the perimeter of the possible," says Holberton.

"My research and teaching practices utilize materials and platforms that physically connect human bodies through technology, highlighting the ways signals of digitally-engineered worlds have physical ramifications; how the extraction of materials from the environment that support technology are destabilizing the planet; and how we might write better rules for digital platforms that consider the external effects on all bodies and respect the most vulnerable ones."

In addition to making an important statement, Holberton feels her research has an important impact on the students she works with, thanks to the collaborative environment that has been created.

"Student engagement and hands-on learning outcomes are central to the research-based collaborative initiatives I've embarked on at SJSU, and will continue to play a central role in each of my upcoming projects," Holberton says. "I want to expose students to challenging techniques and provide professional exposure, while centering their experiences and using my project management and media skills to make the content more accessible."

STATEMENT OF ACTIVITIES

FISCAL YEAR ENDING 06/30/2021

REVENUE AND SUPPORT

Federal Contracts and Grants
$22,417,886

State Contracts and Grants
$9,927,802

Other Contracts and Grants
$7,227,447

Indirect Cost Recovery–C&G
$8,062,849

Administrative and Program Fees
$269,704

Campus Organizations and Other Revenue and Support
$3,354,174

Gifts
$895,889

Investment Income
$4,130,071

Other Revenue and Support
$40,393

Transfers from SJSU and Tower Foundation
$1,358,641

Total Revenue
$57,684,856

EXPENSES

Program Activities

Sponsored Programs
$39,632,479

Board Designated Programs
$516,540

Campus Organizations Expenditures
$3,428,556

Support Activities–Management and General
$9,167,477

Transfers to SJSU and Tower Foundation
$2,500,000

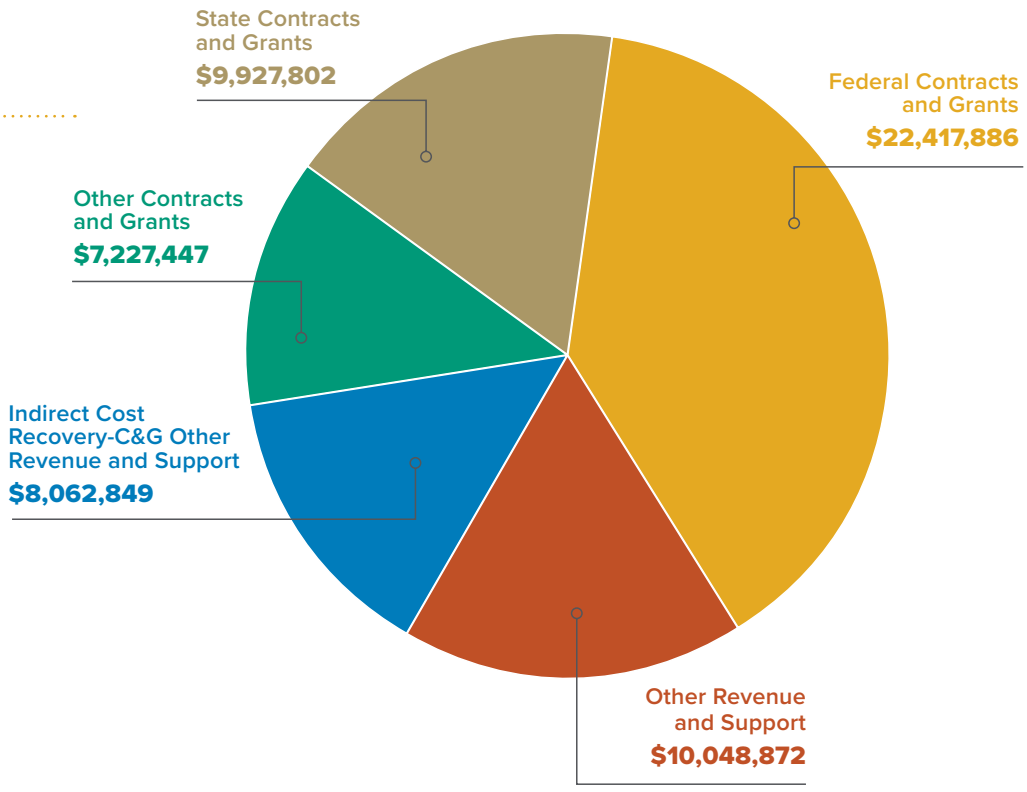
Total Expenses
$55,245,052

CHANGE IN NET POSITION

$2,439,805

Net Position at beginning of Year
$16,794,803

Net Position at end of Year
$19,234,608



GRANTS AND CONTRACTS FISCAL YEAR 2020–2021

College of Business

Dean's Office

Dan Moshavi and Karen E. Philbrick
MTI Database on Terrorist and Serious Criminal Attacks against Public Surface Transportation
U.S. Department of Homeland Security
$147,114

Dan Moshavi and Karen E. Philbrick
CSUTC- California State University Transportation Consortium—Senate Bill 1 (CSU Lead Center)
California State University System
$2,000,000

Dan Moshavi and Karen E. Philbrick
California High-Speed Rail Project 2020
State of California
$665,000

Dan Moshavi and Karen E. Philbrick
Mineta Consortium for Transportation Mobility (MCTM)
California Department of Transportation
$86,087

Dan Moshavi and Karen E. Philbrick
Mineta Consortium for Transportation Mobility (MCTM)
California Department of Transportation
$100,272

Dan Moshavi and Karen E. Philbrick and Hilary K. Nixon
Microtransit Pilot Evaluation
Google, Inc.
$150,000

Marketing & Decision Sciences

Mahboubeh Madadi
A Holistic Artificial Intelligence Tool to Mitigate Human Factor Uncertainty in Operation and Maintenance
University of Tennessee
$188,334

College of Education

Teacher Education

Katya Aguilar
San José State University Single Subject Intern Program 2021-22
Milpitas Unified School District
$80,535

Child & Adolescent Development

Maria Fusaro and Danielle Mead-Nytko
Evaluation of the SJPL Early Education Services Virtual Programming Standards
City of San José
$9,900

Robert Marx
Evaluation of LGBTQ Initiatives
Santa Clara County
$50,000

Ellen Middaugh
Y-Plan San Jose Initiative Grant
UC, Berkeley
$10,000

College of Engineering

Aviation and Technology

Patricia R. Backer
Grant Management for Pioneer Pathways Project, CSU East Bay
CSU, East Bay
$21,445

Patricia R. Backer
Grant Management for Pioneer Pathways Project, CSU East Bay
CSU, East Bay
$22,224

Mechanical Engineering

Saeid Bashash and Mohamed Badawy
Research and Testing of Solar Power Integration with Second-Life Batteries in Grid Tied Systems
RePurpose Energy, Inc.
$99,999

Biomedical Engineering

Alessandro Bellofiore
A Comprehensive Testing Platform for Mechanical Heart Valves to Propel Innovation towards Anticoagulant-Independence
Department of Health & Human Services
$256,375

Electrical Engineering

Chang Y. Choo
Development of AI/ML DSP/FPGA Training Materials for MegaChips Engineers
MegaChips Corporation
$20,000

David Parent, Sang-Joon John Lee, Crystal Han and Dahyun Oh
Acquisition of an Automated Multipurpose Furnace and Reactive Ion Etcher System for Microscale Fabrication Education and Research at SJSU
Department of Defense
$600,000

Hiu Yung Wong
Modeling and Simulation of MST
Atomera
$75,082

Hiu Yung Wong
Materials Modeling Research
Project Synopsys Inc.
$15,000

Hiu Yung Wong
CAREER: Understanding and Modeling of Cryogenic Semiconductor Device Physics down to 4.2K
National Science Foundation
$407,179

Hiu Yung Wong
Power Device Simulation and Optimization
Applied Materials
$65,000

Civil & Environmental Engineering

Indumathi Jeyachandran
Watershed Stewardship Awareness—Educational Workshop Series
Santa Clara Valley Water District
$5,000

Computer Engineering

Nima Karimianbahnemiri
CRII: SaTC: Physical Side-Channel Attacks in Biometric Systems
National Science Foundation
$174,428

Ronald Mak
Intelligent Systems Research and Development Support-3 (ISRDS-3)
KBR Wyle Services, LLC
$140,281

Biomedical, Chemical & Materials Engineering

Ozgur Keles
Scalable Ceramic Alignment for Electro-Active Structures (SCALES) (Subtopic 1.1)
Palo Alto Research Center
$75,000

GRANTS AND CONTRACTS

Anand Ramasubramanian, Wendy Lee and Sang-Joon John Lee
Thrombosis in Microgravity
NASA
$100,000

Anand Ramasubramanian, Wendy Lee and Sang-Joon John Lee
Thrombosis in Microgravity
NASA
$50,000

Industrial & Systems Engineering

Anil R. Kumar
Supportive Interface Design Guidelines
Honda Research Institute
$77,468

Anil R. Kumar
Remote Human Factors Validation Study of 3 mg Sumatriptan Autoinjector, for Migraine Patients
Noble, an Aptar Pharma company
$19,726

Hongrui Liu
Proposal to Test/Research Market Clearing Systems For ISO New England
ISO New England
$73,623

Aerospace Engineering

Nikos J. Mourtos and Laura E. Sullivan-Green
The Teaching Experiment Academy (TEA)
UC, Irvine
$77,058

Dean's Office, College of Engineering

Nichole Okamoto and Mathew Stowe
MESA Engineering Program (MEP) Academic Year 2020-2021
Regents of The University of California
$10,000

Belle Wei, Amy Strage, Xiao Su and David Schuster
Collaborative Research: A Technology Pathway Program in Data Technology and Applications
National Science Foundation
$13,046

College of Health and Human Sciences

Kinesiology

Jennifer A. Schachner
Older Americans Act Funding Sourcewise-Timpany Center San José State University Research Foundation
Sourcewise
$57,301

School of Social Work

Moctezuma Garcia
Community Network Driven COVID-19 Testing among Most Vulnerable Populations in the Central
United States
University of Chicago
$20,4120

Peter Allen Lee
Title IV-E Child Welfare Training 2020-2022
UC, Berkeley
$1,783,190

Peter Allen Lee
Adult Protective Services (APS) Stipend Program
UC, Berkeley
$126,750

Peter Allen Lee
San José State University BASW Mental Health Scholarship Program (MHSP) 2019-2021
Santa Clara County
$150,000

Jennifer Wolf
Enhancing Permanency in Children and Families (EPIC) Program
The Ohio State University
$20,857

Jennifer Wolf
Empowering Communities to Reduce Fatal Opioid Overdoses in Rural Ohio
The Ohio State University
$20,857

College of Humanities and the Arts

Art & Art History

Shannon Wright
Bay Area California Arts Project (BayCAP) 2020-2021 ESSA Federal Fund
Regents of the University of California
$15,000

English & Comparative Literature

Selena Anderson
Center for Literary Arts — Local Arts Grant 2020-2021
Silicon Valley Creates
$4,400

Selena Anderson
Center for Literary Arts City of San José Coronavirus Relief Grant
City of San José
$8,100

James Coleman
San José Area Writing Project SFA 2020-2022
UC, Santa Barbara
$69,750

Roohi Vora
San José Area Writing Project 2020-2021 CSMP/ESSA Federal Funds
Regents of The University of California
$39,082

College of Professional and Global Education

Applied Data Science

Lee C. Chang
San José Data Strategy Pilot
City of San José
$20,280

College of Science

Biological Sciences

Tzvia Abramson
SJSU Stem Cell Internships in Laboratory-Based Learning (SCILL)
California Institute of Regenerative Medicine
$49,500

Walter Adams
Microbial and Host Factors that Promote Epithelial Disruption and S. pneumoniae Transit out of the Lung
National Institutes of Health
$146,500

Maya Devries, Scott L. Hamilton and Michael Graham
Strengthening Sustainability in an Acidified Ocean: Does the Co-Culture of Seaweeds and Shellfish Improve Shell Integrity in Farmed Red Abalone
UC, San Diego
$60,000

FISCAL YEAR 2020–2021

Maya Devries, Scott L. Hamilton and Michael Graham

Cost-share: Strengthening Sustainability in an Acidified Ocean: Does the Co-Culture of Seaweeds and Shellfish Improve Shell Integrity in Farmed Red

California State University System

$30,000

Rachael L. French

The Role of Insulin Signaling in Developmental Ethanol Toxicity

Department of Health & Human Services

$359,537

Bree Grillo-Hill

Roles for Intracellular pH Dynamics in Cancer Cell Behaviors

Department of Health & Human Services

$109,875

Frank Huynh

Regulation of Mammary Gland Development by Sirtuin 4

National Institutes of Health

$146,500

Jennifer Johnston

Identification of Novel Safe Harbors to be Used in a Gene Editing Strategy for the Treatment of Hemophilia A

Department of Health & Human Services

$139,586

Cleber C. Ouverney and Wendy Lee

Inquiry-Based Human Microbiome for Undergraduates in Distance Learning

Department of Health & Human Services

$86,400

Elizabeth Skovran

Efficient Recovery of Rare Earth using Methylobacterium Extorquens

UC, Berkeley

$125,785

Miri K. Vanhoven

The Effect of Sleep on Neural Circuit Connections

UC, San Francisco

$186,357

Miri K. Vanhoven

Olfactory Memory Acquisition Consolidation and Recall

UC, San Francisco

$115,468

Katherine Wilkinson

Control of Muscle Proprioceptor Sensitivity

Department of Health & Human Services

$108,375

Geology

Kimberly Blisniuk

Mapping the Rodgers Creek Fault, Before and After the Kincade Fire, to Determine Long Term Geologic Fault Slip Rates and the Distribution of Slip across the Northern San Andreas Fault System, CA

Department of Interior

$27,500

Kimberly Blisniuk

CAREER: Re-Evaluating the Evolution of the Southern San Andreas Fault along its Restraining Bend from Holocene to Mid-Quaternary Timescales via 36Cl/10Be Burial and Cosmogenic

Exposure Dating

National Science Foundation

$116,774

Robert B. Miller

Collaborative Research: Investigating the Relationships Between Magmatic 'Flare-Ups', Crustal

Rheology, and Arc Collapse

National Science Foundation

$77,822

Ryan Portner

Shallow Marine Lava-Water Interaction: Columbia River Basalt Group, Central Oregon Coast

Department of Interior

$23,267

Chemistry

Lionel E. Cheruzel

RUI: Light-Driven Selective Chemoenzymatic C-H Functionalization

National Science Foundation

$50,000

Laura C. Miller-Conrad

Blocking Cationic Antimicrobial Peptide-Resistance in Pseudomonas Aeruginosa

National Institutes of Health

$104,550

Alberto A. Rascon, Jr.

Vector Control Strategy Through Inhibition of Aedes aegypti Midgut Proteases

National Institutes of Health

$109,875

Karen A. Singmaster

CSU SJSU LSAMP Program 2018-2021

CSU, Sacramento

$60,000

Karen A. Singmaster, Cleber C. Ouverney and Alberto A. Rascon, Jr.

San José State University Rise Program

Department of Health & Human Services

$263,807

Annalise L. Van Wyngarden

American Chemical Society Summer School in Nuclear and Radiochemistry

City University of New York

$197,499

Ningkun Wang

Intramolecular Allosteric Regulation of SIRT1 Deacetylase Activity by the N-terminal Domain

Department of Health & Human Services

$144,500

Abraham Wolcott

Fundamental Surface Science of Nanoscale Diamond and their Interaction with Biological Surfaces

Department of Defense

$11,168

Abraham Wolcott

Fluorescent Enhancement of the Nitrogen Vacancy Center in Nanoscale Diamond for Bioimaging Applications

National Institutes of Health

$108,375

Dean's Office

Elaine D. Collins

SJSU MESA Schools Program — Downtown College Prep

$9,261

Elaine D. Collins

SJSU MESA Schools Program ESUHSD Agreement

East Side Union High School District

$46,620

Elaine D. Collins

SJSU MESA SCHOOLS PROGRAM RCLA (Roberto Cruz Leadership Academy) Agreement 2019-2022

Roberto Cruz Learning Academy

$4,862

Elaine D. Collins

SJSU MESA Schools Program ARUESD Agreement

Alum Rock Unified Elementary School District

$23,940

GRANTS AND CONTRACTS

Physics and Astronomy

Michael J. Kaufman

Using the Astronomical Infrared Bands as Calibrated Probes of Astrophysical Conditions with the NASA Ames PAH IR

NASA

$279,885

Thomas Madura

Career Exploration Lab: 3D Printing and STEM Engagement for High School Students with Visual Impairments and their Educators

National Science Foundation

$1,499,733

Cassandra A. Paul, Tammie Visitainer, Marcos Pizarro and Katherine Wilkinson

Transforming Undergraduate Teaching and Learning Through Culturally Sustaining, Active, and Asset-Based Approaches to Introductory Science Courses

National Science Foundation

$855,241

Aaron J. Romanowski

The Color-Magnitude Diagram of an Extremely Metal-Poor Globular Cluster

Space Telescope Science Institute

$51,7300

Neil Switz and Bree Grillo-Hill

STEM Workforce Development Incorporating Low-Light Fluorescence Detection and Imaging with Applications to COVID Diagnostics

UC, San Diego

$10,000

Mathematics and Statistics

Jordan Schettler

Undergraduate Research Groups in the CSU Alliance for PUMP: Preparing Undergraduates through Mentoring toward PhDs

National Science Foundation

$63,049

Julie S. Spitzer

Just in Time: Online Mathematics Professional Development

UC, Los Angeles

$38,000

Julie S. Spitzer

SCVMP-CSMP-ESSA20 (Fed funds)

Regents of The University of California

$24,223

Julie S. Spitzer

Santa Clara Valley Mathematics Project (CSMP–State)

Regents of The University of California

$20,000

Yan Zhang and Dashiell Fryer

Beacon Chain and Gas Market Analyses for Ethereum 2.0

Ethereum Foundation

$24,981

Yan Zhang and Dashiell Fryer

Gas Price Analysis of Ethereum Fee Markets

Ethereum Foundation

$25,000

Meteorology & Climate Science

Sen Chiao

Detailed Quantitative Precipitation Forecasts

Santa Clara Valley Water District

$29,997

Craig B. Clements

Collaborative Proposal: Sundowner Winds Experiment in Santa Barbara, CA (SWEX)

National Science Foundation

$95,341

Craig B. Clements

Vertical Wind Profiling for Real-Time Fire Weather and PSPS Assessment

Southern California Edison

$76,870

Craig B. Clements

A Multiscale Study of the Coupling Between Flow, Fire and Vegetation — Influence of Vegetation Distribution and Flow on Fire Behavior and Plume Development for Risk Mitigation in Prescribed Burns

Worcerster Polytechnic Institute

$22,317

Minghui Diao

Advancing the Understanding of Cloud Microphysical Processes and Aerosol Indirect Effects in High-Latitude Mixed-Phase Clouds

Department of Energy

$382,061

Adam Kochanski

Quantitative Attribution of Wildfires on Summertime Ozone Concentrations along the Wasatch Front

Utah Division of Air Quality

$79,768

Adam Kochanski

Coupled Interactive Forecasting of Weather, Fire Behavior, and Smoke Impact for Improved Wildland Fire Decision Making

Colorado State University

$149,882

Adam Kochanski and Craig B. Clements

Understanding Urban and Wildland Fire Dynamics

Lawrence Livermore National Laboratory

$43,242

Adam Kochanski and Ali Tohidi

Collaborative Research: Biomass Burning Smoke as a Driver of Multi-scale Microbial Teleconnections

National Science Foundation

$99,783

Adam Kochanski and Miguel Valero

Understanding Urban and Wildland Fire Dynamics

Lawrence Livermore National Laboratory

$31,185

Qian Tan

The NOAA Cooperative Science Center in Atmospheric Sciences and Meteorology

Howard University

$98,750

Miguel Valero

Closing Gaps Project: SJSU: Prototype Systems for 3D Modeling of Plumes from Ground Observations

U.S. Forest Service

$10,000

Moss Landing Marine Lab

Ivano W. Aiello

Sedimentology and Mineralogy of Guaymas Basin's Deep Subseafloor Habitats (IODP Expedition 385)

Columbia University

$17,958

Ivano W. Aiello

Elkhorn Slough Foundation Project — Advanced Geospatial and Geotechnical Services and Development of Materials to Inform On-Going Estuarine

Elkhorn Slough Foundation

$105,000.00

Ivano W. Aiello and Murray Stein

Research Vessel Use for Monthly Water Sampling

Applied Marine Sciences, Inc.

$5,000

FISCAL YEAR 2020–2021

Holly A. Bowers and Ross P. Clark

Evaluating Agricultural Management Practices Benefiting the Monterey Bay: Reducing Nutrient

Loads and Harmful Algal Bloom (HAB) Events

Environmental Protection Agency

$213,931

Holly A. Bowers and Jason G. Smith

Advancing Portable Detection Capabilities of Harmful Algal Bloom Species in California Waters

University of Southern California

$85,191

Dustin Carroll

ECCO-Darwin Model Exploration of Physical and Biogeochemical Interactions in the Land-Sea Continuum

Jet Propulsion Laboratory

$113,812

Dustin Carroll

Impacts of Changing Sea-Ice on Arctic Ocean Biology

Jet Propulsion Laboratory

$87,4820

Ross P. Clark

Provide Archival, Analysis, and Publishing Services on Benthic Data Previously Collected for Multiple Project

Creative Environmental Conservation

$60,000

Ross P. Clark

Restoring Coastal Dune Ecosystem Health and Resilience at Salinas River State Beach (SRSB Dunes-CDFW: 2020-01)

Coastal Conservation & Research

$150,000

Ross P. Clark and Marco A. Sigala

SWRCB-SWAMP Agreement Number 20-006-270

California State Water Resources Control Board

$469,300

Ross P. Clark

Developing Riparian Management Goals through Validation of Assessment Tools

Environmental Protection Agency

$249,286

Ross P. Clark

North Monterey County High School Habitat Enhancement Project

Resource Conservation District of Santa Cruz County

$3,162

Ross P. Clark

A Collaborative Approach to Groundwater Sustainability in Southern Monterey Bay Watersheds

California Department of Conservation

$300,000.00

Ross P. Clark

Managing Water Resources for Multiple Benefits in the Greater Monterey County IRWM Region

City of Salinas

$501,001

Ross P. Clark and Holly A. Bowers

Evaluating Agricultural Management Practices Benefiting the Monterey Bay: Reducing Nutrient Loads and Harmful Algal Bloom (HAB) Events

Environmental Protection Agency

$786,068

Thomas Connolly, Kenneth H. Coale and Jason G. Smith

CeNCOOS: Long-Term Monitoring of Environmental Conditions in Support of Marine Area Management in Central & Northern CA

Monterey Bay Aquarium Research Institute

$76,000

Colleen A. Durkin

Linking Sinking Particle Chemistry & Biology w/ Changes in the Magnitude & Efficiency of Carbon Export into Deep Ocean

University of Maine

$138,796

Michael E. Feinholz and Mark Yarbrough

Marine Optical Buoy (MOBY) Operations and Technology Refresh

University of Miami

$2,440,900

Luke Gardner

SJSURF/MLML–Aquaculture Services

Elkhorn Slough Foundation

$31,753

Jonathan B. Geller

Marine Invasive Species Molecular Analysis (AGREEMENT NUMBER P2075008)

California Department of Fish and Wildlife

$249,321

Jonathan B. Geller

Metagenetic Analysis. Invertebrate Diversity and Geographic Distribution based on Plankton and Settlement Plates

Smithsonian Environmental Research Center

$7,925

Jonathan B. Geller

Illumina MiSeq Library Preparation of Plankton Collected by the Invasion Ecology Laboratory, SERC

Smithsonian Environmental Research Center

$9,757

Jonathan B. Geller

Assessing Ballast Water Management and Invasions in Great Lakes: Genetic and Metagenetic Analysis

Smithsonian Environmental Research Center

$220,000

Jonathan B. Geller

Marine Invasive Species Molecular Analysis (AGREEMENT NUMBER P2075008)

California Department of Fish and Wildlife

$83,937.00

Michael Graham

Business Economic Analysis for West Coast based Urchin Ranching

UC, San Diego

$25,296

Michael Graham and Scott L. Hamilton

Assessment of Practical Methods for Re-Establishment of Bull Kelp Populations at an Ecologically Relevant Scale

UC, San Diego

$173,802

Maxime Grand and Luke Gardner

Evaluating the Contribution of Seaweed Aquaculture to Regional and Global Bromoform Production Rates

UC, San Diego

$59,445

Maxime Grand and Luke Gardner

COST SHARE- Evaluating the Contribution of Seaweed Aquaculture to Regional and Global Bromoform Production Rates

CSU, Monterey Bay

$29,723

Herbert Gary Greene

Assessing Pacific Sand Lance Subtidal Habitats and Biomass in Regards to Salmon Foraging in the San Juan Archipelago

Washington Department of Fish and Wildlife

$100,000

Scott L. Hamilton and Richard M. Starr

California Collaborative Fisheries Research Program — Monitoring and Evaluation of California Marine Protected Areas

California Natural Resources Agency

$1,000,000

GRANTS AND CONTRACTS

Scott L. Hamilton, Michael Graham and Luke Gardner
Creating New Products and Markets–Development of Techniques for the Cultivation of Monkeyface Pricklebacks as a Sustainable Alternative to Unagi
Department of Commerce
$300,000

Scott L. Hamilton
Evaluating the Performance of California's MPA Network Through the Lens of Sandy Beach and Surf Zone Ecosystems
UC, Santa Barbara
$62,289

Scott L. Hamilton
Validating Age and Growth of Captive Fishes from Mexican Waters at the Monterey Bay Aquarium
Monterey Bay Aquarium
$15,000

Scott L. Hamilton
CA Sea Grant Fellowship (Katherine Neylan): Eat Your Greens: Evaluating Microalgae Supplemented Feeds for Sablefish Nutrition and Growth
UC, San Diego
$39,975

Scott L. Hamilton and Michael Graham
Development of Techniques for the Cultivation of Monkeyface Pricklebacks as a Sustainable Alternative to Unagi
UC, San Diego
$48,949

James Harvey
Estuarine Wetland and Nearshore Ecology Studies along the Pacific Flyway
United States Department of the Interior
$53,000

James Harvey
Estuarine Wetland and Nearshore Ecology Studies along the Pacific Flyway
United States Department of the Interior
$110,000

James Harvey
Estuarine Wetland and Nearshore Ecology Studies along the Pacific Flyway
United States Department of the Interior
$49,667

James Harvey
BeachCOMBERS: Coastal Ocean Mammal and Bird Education and Research Surveys
U.S. Fish and Wildlife Service
$24,929

James Harvey and Jonathan Mike Prince
Auxiliary General Purpose Oceanographic Research (AGOR) Support Services
Office of Naval Research
$80,000

Wesley A. Heim, Marco Sigala and Ross P. Clark
SWRCB-SWAMP Agreement Number 20-006-270
California State Water Resources Control Board
$1,941,200

Wesley A. Heim and Autumn L. Bonnema
Contract No: 1287– San Francisco Estuary Institute/Aquatic
San Francisco Estuary Institute
$49,636

Wesley A. Heim and Autumn L. Bonnema
LA River and San Gabriel Watershed Fish Collections–Aquatic Bioassay
Aquatic Bioassay Lab
$12,530

Wesley A. Heim
Echo Park Lake Fish Collection
FMF Pandion
$12,100

Birgitte McDonald
CAREER: Foraging Ecology and Physiology of Emperor Penguins in the Ross Sea
National Science Foundation
$935,931

Birgitte McDonald
Coll. Res.: At-Sea Experimental Disturbances to Characterize Physiological Plasticity in Diving Northern Elephant Seals
National Science Foundation
$9,963

Birgitte McDonald
Support for Basic Response to Marine Mammal Strandings in California's Monterey Bay
UC, Santa Cruz
$16,966

Marco A. Sigala
2020 Bay Margins Sediment Study Field Sample Collection
San Francisco Estuary Institute
$87,300

Marco A. Sigala
Ahtna Sharpe 2020
Ahtna Environmental Inc.
$7,200

Marco A. Sigala
Morro Bay Foundation Data Navigator Phase 2–Update and Rebuild
Bay Foundation of Morro Bay
$136,300

Marco A. Sigala
SWRCB-SWAMP Agreement Number 20-006-270
California State Water Resources Control Board
$130,000

Marco A. Sigala
CDFW Instream Flow Program Quality Assurance Support
California Department of Fish and Wildlife
$300,000

Marco A. Sigala
Ahtna Sharpe 2021
Ahtna Environmental Inc.
$7,905

Timothy P. Stanton
Deliver Flux Instrument Package for IceNode Vehicle
Jet Propulsion Laboratory
$27,000

Timothy P. Stanton
Long Term Observations of Upper Ocean Fluxes and Pycnocline Diffusivity in the Canada Basin Buoy Instrumentation
Office of Naval Research
$60,711

Richard M. Starr
Combining Underwater Video and Hook and Line Surveys of Untrawlable Areas in the Cowcod Conservation Areas to Inform Harvest Opportunities and Management Measures
Department of Commerce
$300,000

Richard M. Starr
Characteristics of Bycatch in California Fisheries
Resources Legacy Fund
$19,500.00

Richard M. Starr
Subaward from CSUMB– James Lindholm Contract with Navy
CSU, Monterey Bay
$60,000

Alison Stimpert
Soundscape Characterization in the National Marine Sanctuaries using Passive Acoustic Monitoring
Naval Postgraduate School
$99,963

FISCAL YEAR 2020–2021

Edward Thornton
Coastal Land-Air-Sea Interaction–Thornton Portion
Office of Naval Research
$44,6340

Nicholas A. Welschmeyer
PIA- Evoqua Ballast Project
California Maritime Academy
$63,076

Nicholas A. Welschmeyer
EcoChlor2 Ballast Testing
California Maritime Academy
$220,766

Mark Yarbrough and Michael Feinholz
Implementation of MarONet for Support of OCI/PACE Vicarious Calibration
University of Miami
$711,141

Mark Yarbrough and Michael Feinholz
Implementation of MarONet f or Support of OCI/PACE Vicarious Calibration
University of Miami
$481,521

College of Social Sciences

Economics

Darwyyn Deyo
CSOR Licensing Research Project
The Knee Center for the Study of Occupational Regulation
$10,981

Environmental Studies

Katherine Kao Cushing
CommUniverCity: Community Leadership Program FY2020-21
City of San José
$85,000

Katherine Kao Cushing
CommUniverCity: Community Services Program 2020-21
City of San José
$100,000

Katherine Kao Cushing, Richard Kos and Jason Su
Cultivating a Community-Owned Vision for East San José Neighborhoods (Alum Rock)
City of San José
$53,000

Katherine Kao Cushing
CommUniverCity's Growing Sustainably Program
Santa Clara Valley Open Space Authority
$160,000

Bruce Olszewski
Household Hazardous Waste (HHW) Call and Appointment Center for Santa Clara County
Santa Clara County
$100,000.00

Amanda Stasiewicz
Wildfire Evacuation & Management during the 2020 Lightning Complex Wildfires: Exploring Influences on Resident Action during SCU & CZU Wildfire Events
John S. and James L. Knight Foundation
$77,243

Justice Studies

Margaret Stevenson
San José State University Research Foundation (SJSURF) Service Navigation–2020-2021
Santa Clara County
$744,445

Political Science

Frances Edwards and Kaikai Liu
Best Practices in Disaster Public Communications
John S. and James L. Knight Foundation
$112,728

Leonard Lira, Younghee Park, and Karthika Sasikumar
USC-SJSU ICCAE Consortium's National Security Scholars Research Program
University of Southern California
$25,000

Psychology

Sean Laraway
Human Systems Integration: Collaborative Human Factors Research to Improve Safety, Efficiency, and Reliability of NASA's Aeronautics and Space Missions
NASA
$13,066,096

Sean Laraway
Test Subject Recruitment Office Task 7
ASRC Federal
$18,139

Sean Laraway
Test Subject Recruitment Office Task 1
ASRC Federal
$147,448

Susan Snycerski
Future Vertical Lift: Collaborative Research on Flight Control, Autonomous Rotorcraft, and Human-Systems Interface Design
NASA
$2,330,055

David Schuster
CAREER: Understanding the Cognitive Processes of Computer Network Defense
National Science Foundation
$16,000

Ahoura Zandiatashbar
Urban & Regional Planning
2021 Census Data Research and GIS Visualization Pilot
University of Illinois at Chicago
$8,283

University Programs

Curriculum and Assessment

Elena Klaw and Andrea Tully
AmeriCorps Civic Engagement (ACE) Fellows at San José State University
California Volunteers
$478,141

Elena Klaw and Andrea Tully
San José State University (SJSU) Civic Action Fellows formerly known as AmeriCorps Civic Engagement Fellows (ACE Fellows @ SJSU)
California Volunteers
$344,762

Counseling and Psychological Services

Wei-Chien Lee
Outcome Study of the Garrett Lee Smith (GLS) Campus Suicide Prevention Grant
Department of Health and Human Services
$101,977

Office Of Research

Mohamed Abousalem
The City of San José 2020 Resident Survey–SJSU
Silicon Valley Community Foundation
$15,660

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Division of Student Affairs

Maria E Cruz
ASPIRE (Student Support Services) — San José State University — FY 2020-2025
Department of Education
$509,776

Maria E Cruz
The Ronald E. McNair Postbaccalaureate Achievement Program
Department of Education
$289,267

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